

IN THE CLAIMS

For the convenience of the Examiner, all pending claims of the present application are shown below whether or not an amendment has been made. Please refer to the attached sheets showing a marked-up version of the amendments to the claims.

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1. (Original) A method for determining the position of at least one second transmitting and receiving device in respect of a first transmitting and receiving device in a passive access control system operating in the GHz range, comprising the steps of:
  - a) using a radar method, particularly an FM-CW radar method, by which signals are received in the first transmitting and receiving device on the left-hand side and right-hand side of a modulation frequency, and
  - b) determining the distance of two signals closest to the left-hand side and right-hand side modulation frequency, wherein the distance of the two signals is proportional to the distance between the first transmitting and receiving device and at least the second transmitting and receiving device so that multipath propagations are not taken into consideration.
2. (Original) The method according to claim 1, wherein the distance of the signals is determined by means of at least one bandpass filter wherein in a first measurement, starting out with a predefined lowest bandwidth and if signals are not detected within this bandwidth, the distance of the bottom and top limits of at least one bandpass filter is increased by the modulation frequency for the next measurement.
3. (Original) The method according to claim 2, wherein each subsequent measurement takes place with a predefined bandwidth in each case.
4. (Original) The method according to claim 3, wherein different ranges are assigned to different top and bottom measurements.

5. (Previously Amended) A first transmitting and receiving device for determining the position of a second transmitting and receiving device, wherein the first transmitting and receiving device comprises a FM-CW radar transmitting and receiving device wherein signals are received on the left-hand side and right-hand side of a modulation frequency, said device determines the distance of two signals lying closest to the left-hand side and right-hand side of the modulation frequency, wherein the distance of the two signals is proportional to the distance between the first transmitting and receiving device and the second transmitting and receiving device so that multipath propagations are not taken into consideration.

6. (Original) The transmitting and receiving device according to claim 5, wherein the at least one bandpass filter can be varied to perform consecutive measurements with different increasing bandwidths in each case.

7. (Original) The transmitting and receiving device according to claim 5, wherein the transmitting and receiving device has two bandpass filters to detect signals lying on the left-hand side and right-hand side of the modulation frequency, respectively.

8. (Currently Amended ) An arrangement comprising:

first and second transmitting and receiving devices,

the first transmitting and receiving device can determine the position of the second transmitting and receiving device,

the first transmitting and receiving device is a FM-CW radar transmitting and receiving device wherein signals are received on the left-hand side and right-hand side of a modulation frequency, said device includes at least two bandpass filters and determines the distance of two signals lying closest to the left-hand side and right-hand side of the modulation frequency, wherein the distance of the two signals is proportional to the distance between the first and the second transmitting and receiving devices so that multipath propagations are not taken into consideration,

- the first transmitting and receiving device is a base station of a vehicle, and  
wherein

- the second transmitting and receiving device has an ID transmitter.

9. (Original) The arrangement according to claim 8, wherein the second transmitting and receiving device is embodied as a reflector that returns the signals of the first transmitting and receiving device in a modulated way.

10. (Previously Amended) The arrangement according to claim 8, wherein a bandpass filter can be varied to perform consecutive measurements with different increasing bandwidths in each case.

11. (Cancelled)